

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

In the claims

Claim 1 is amended to clarify that the inner wall forming the airflow channel extends from an exterior of the top surface to an opposite exterior of the bottom surface.

This amendment is supported by paragraph [0037] and Figs. 3 and 4 of the original specification, as well as by the original claim 1 which noted that the main body has “a hole” (now referred to as the airflow channel) “piercing through said main body from a top surface to a bottom surface.” Applicant notes that the language of “piercing through” is maintained in the present claim 1.

It is respectfully submitted that for the airflow channel to “pierce through” the main body from top to bottom, the airflow channel necessarily extends from the top exterior to the bottom exterior, since if the channel does not extend to an exterior of both, opposite sides of the main body, it would not “pierce through” the main body.

Therefore, while the presently amended claim more clearly sets forth that the airflow channel extends from a top exterior to a bottom exterior of the main body (piercing through the main body), it is respectfully submitted that no new issue is raised requiring further search or examination since this arrangement is inherent to the airflow channel “piercing through said main body from a top surface to a bottom surface” as originally set forth in claim 1 and recited in the present claim 1.

Accordingly, Applicant requests entry and consideration of the presently amended claims.

Rejection of claims 1, 6, and 8 under 35 U.S.C. § 102(b)

Claims 1, 6, and 8 presently stand rejected as being anticipated by Harris et al (U.S. 4,953,058, hereafter *Harris*). This rejection is respectfully traversed for the following reasons.

Claim 1 provides that a main body has an airflow channel piercing through the main body from a top surface to a bottom surface thereof, wherein the airflow channel is formed by an inner wall extending from an exterior of the top surface to an opposite exterior of the bottom surface.

It is respectfully submitted that Harris fails to disclose or suggest a main body having an airflow channel piercing through the main body from a top surface to a bottom surface thereof, wherein the airflow channel is formed by an inner wall extending from an exterior of the top surface to an opposite exterior of the bottom surface.

Harris discloses a modular segment adapted to provide a passive cooled housing for heat generating electronic modules. As shown in Harris' Figs. 1 and 3, the modular segment 10 comprises a vertically extending hollow box beam portion 12, which is formed by sidewalls 18, 20, 22, and 24. The sidewalls 18, 20 and 22 are each provided with fins 52, so as to form vertically extending channels.

In addition, the modular segment 10 is also provided with a base portion 34 having a spacer section 36 that extends longitudinally adjacent to the sidewall 24. The spacer section 36 has sloping shoulders 38 and 40 and a central flattened shoulder 42. The ribs 26 and 28 extend downwardly only a predetermined distance and the central rib 46 is longer than the two ribs 26/28, wherein the ribs 26/28 and the central rib 46 correspond to the sloping shoulders 38/40 and the central flattened shoulder 42, respectively.

When the modular segments 10 are assembled via the flange 58 at the base portion 34, the central rib 46 contacts the central flattened shoulder 42 and the ribs 26 and 28 form a space between the lower ends thereof and the sloping shoulders 38 and 40, wherein the ribs 26, 28, 46 cooperate with the fins 52 to form channels (as shown in Fig. 2). The printed circuit boards 62 are disposed in the hollow channels 14 communicated with the

channel 48 of the base portion 34. Hence, the connectors 66 of the printed circuit boards 62 can be connected with the rigid connector sections 68 of the flexible cable means 70 as shown in Figs. 7 and 8.

In the Office Action, the Examiner regards the housing 56, the inner wall pipes composed of plural sealed modular segments 10, the printed circuit boards 62, and the flange 58 as the main body, the inner wall, the printed circuit board, and the supporting device, respectively, of the present invention.

However, as recited in the amended Claim 1 of the present invention, the main body has an airflow channel, wherein the airflow channel is formed by an inner wall extending from exterior of the top surface of the main body to an opposite exterior of the bottom surface of the main body. Accordingly, the airflow channel is encircled by an inner wall extending from the exterior of the top surface to the opposite exterior of the bottom surface, as shown in Figs. 3 and 4 of the present application, so as to form an airflow channel piercing through the main body from top surface to bottom surface, and more particularly from the exterior of the top surface an exterior of the bottom surface.

The structure of Harris' air channels is different from that of the present invention. As described in col. 5 lines 39-41 of Harris' patent, the channels are formed by the ribs 26, 28, the central rib 46 and fins 52 between the sidewalls 20 and 24 (the inner wall pipes composed of plural sealed segments 10 considered by the Examiner).

However, according to the description of col. 5 lines 35-39 of Harris' patent, the ribs 26, 28 and the fins 52 extend downwardly only a predetermined distance, wherein the lengths thereof are *shorter than* the length of the central rib 46 as shown in Figs. 2 and 3. Even if the portion between the lower ends of the ribs 26/28 and the sloping shoulders 38 and 40 in Harris' patent is regarded as the bottom surface of the present invention, it is to be understood that though the ribs 26/28, and the fins 52 in Harris's patent start from an exterior of the top surface of the housing 56, they do not extend to the opposite exterior of the bottom surface (opposite to the exterior of the top surface).

Moreover, since the ribs 26/28 and fins 52 in Harris's patent do not extend to the exterior of the bottom surface, Harris' airflow channels are different from the airflow channel piercing through the main body from top surface to bottom surface as recited in Claim 1 of the present invention.

Furthermore, as recited in Claim 1 of the present invention, the airflow channel pierces through the main body from a *top surface* to a *bottom surface*.

However, Harris' airflow channels do not pierce through a bottom surface of a main body. On the contrary, as can be clearly seen in Harris' Fig. 2, airflow channels (indicated by the illustrated airflow) extend from a side portion and not from a bottom surface.

Even the examiner's marked-up reproduction of Harris' Fig. 5 (at page 3 of the recent Office action) indicates that the examiner incorrectly construes a side wall to be a bottom surface. It must be recognized that claim 1 of the present application refers to top and bottom surfaces of the main body itself, and therefore construing a bottom part of a *side wall* to be a bottom surface is not consistent with top and bottom surfaces of the main unit itself.

Further still, as recited in Claim 1 of the present invention, the airflow channel piercing through the main body from a top surface to a bottom surface, and the *supporting device is disposed on the bottom surface* of the main body.

Accordingly, it is to be understood that the airflow channel pierces through the bottom surface of the main body where the supporting device is disposed. As can be seen in Harris' Fig. 6, the flange 58 is disposed on the base portion 34 (shown but not identified in the right-rear unit illustrated). However, the channels do not pierce through the base portion 34, as shown in Fig. 2. In addition, the airflow channel of the present invention is formed by an inner wall extending from exterior of said top surface to opposite exterior of said bottom surface. However, the inner wall pipes composed of the ribs 26, 28, central rib 46, fins 52 and the sidewalls 20 and 24 of plural sealed segments 10 are not extended

to the opposite exterior of the base portion 34 as well (as shown in Fig. 2 of Harris's patent).

For at least these reasons, it is respectfully submitted that claim 1, and therefore also claims 2-6 and 8, are allowable over the cited reference. Accordingly, withdrawal of the rejection is requested.

Rejection of claims 4 and 5 under 35 U.S.C. § 102(a)

Claim 4 presently stands rejected as being unpatentable over Harris, and claim 5 is rejected as being unpatentable over Harris in view of U.S. 2004/0095713 (Chuang). These rejections are respectfully traversed for at least the following reasons.

Regarding claim 4, which depends from claim 1, it is respectfully submitted that Harris fails to disclose or suggest each and every element set forth in claim 1 as discussed above, and that claim 1 is accordingly allowable over Harris. Therefore, it is respectfully submitted that claim 4 is allowable over Harris at least due to its dependency from claim 1.

Regarding claim 5, which depends from claim 1, it is respectfully submitted that Chuang fails to supplement the deficiencies of Harris with respect to the required elements of claim 1 as discussed above, and therefore claim 1, along with claim 5 at least due to its dependency from claim 1, are allowable over the cited references.

For at least these reasons, withdrawal of these rejections is requested.

Conclusion

Every effort has been made to place the application fully in condition for allowance, and to remove all issues raised by the Examiner in the Official Action.

In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1-6 and 8 be allowed and the application be passed to issue.

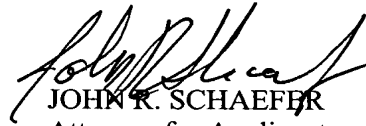
Application No.: 10/676,115  
Examiner: Hung S. BUI  
Art Unit: 2841

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown.

BACON & THOMAS, PLLC  
625 Slaters Lane, Fourth Floor  
Alexandria, Virginia 22314-1176  
Phone: (703) 683-0500

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Respectfully submitted,

  
JOHN R. SCHAEFFER  
Attorney for Applicant  
Registration No. 47,921